

Shrikes, Laniidae, feeding on Marsh Warblers *Acrocephalus palustris* during migration

Most Palaearctic bird species wintering in tropical Africa lay down fat deposits before migration. Moreau & Dolp (1970) mention that shrikes, Laniidae, studied while crossing the Sahara in autumn, contrary to other Passerine species, had no fat reserves.

From 1980 to 1984 during autumn migration 25 000 Palaearctic passerine migrants were caught and ringed in a small desert oasis 25 km north west of Port Sudan in the Sudan Red Sea Hills at Khor Arba'at (Nikolaus 1983a).

In 1984, with three people operating, it was possible to run a standard set of mist nets (four 6-m nets and five 12-m nets) on most days. The nets were up from sunrise (5:00 hrs) to 13:00 hrs in a lemon tree garden of 600 m². In the period from 17 August to 23 September, 12 000 birds were ringed. At 41.2 per cent, Marsh Warblers *Acrocephalus palustris* was the dominant species. Nevertheless, 7.7 per cent of all birds handled were shrikes, of which the Red-backed Shrike *Lanius collurio* was the most common at 4.4 per cent. Other shrikes caught were Nubian Shrike *Lanius nubicus*, 1.6 per cent, Woodchat Shrike *L. senator*, 1.1 per cent, Lesser Grey Shrike *L. minor*, 0.5 per cent, Great Grey Shrike *L. excubitor*, 0.03 per cent and Red tailed Shrike *L. isabellinus*, 0.03 per cent. The main passage took place between the last week of August and the third week of September with the peak in the first week of September. Even though the weather conditions at the study site were very uniform, birds passed in waves, probably dependant on the weather conditions in their take-off area, presumably somewhere between the Eastern Mediterranean Sea and the Caspian Sea.

As in previous years, it was quite noticeable that one or two days after a 'bird wave', a wave of always shrikes arrived (see Table 1). Often the garden was full of shrikes feeding on weak birds, mainly Marsh Warblers, but other species were taken as well. The shrikes nearly always fed on the brain of the killed victim. Most shrikes disappeared the same day as the other migrants, but weak shrikes established territories, for instance near a slowly running water tap or a mist-net, so that some mist-nets had to remain closed. Surprisingly, nearly all the shrikes remaining lost weight, even though there was a good source of food available, and they died after some days. The number of shrikes not leaving Khor Arba'at in 1984 is given in Table 2.

Unfortunately, comparative numbers for the other years' of study at this site are not available. However, in 1981 and 1982 (especially in 1982) large numbers of dead birds were found in the garden every day, while dead shrikes were comparatively few. Also, in 1983, under a single acacia tree in the desert near Atbara (17°35N, 34°25E), the remains of more than 100 birds which had died during autumn migration in 1982 were found (Nikolaus 1983b). In 1983 and 1984 there were no such finds.

In Table 3 the weights of some major species caught at Khor Arba'at are given for 1982 and 1984. The table shows that in 1982, when most passing passerine species were lower in weight, shrikes were in better condition, while in 1984 it was clearly the opposite. This fact could be linked to fattening conditions in the take-off area or unfavourable weather or wind conditions during migration. The fact that shrikes migrating on the same probable route as the other species are reversely affected, could be explained by the observations made at Khor Arba'at: that shrikes feed on other passerines during migration. In years with good migratory conditions for most passerines on the East African migration route, shrikes show greater losses than in years with unfavourable migratory conditions, when drop-out birds offer plenty of food. It could be different in years when alternative food, such as locusts, is available during the desert crossing.

Table 1. Numbers of shrikes, Laniidae, in relation to total numbers and Marsh Warblers *Acrocephalus palustris* caught at Khor Arba' at in autumn 1984

August dates	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Total birds	42	25	34	183	249	96	62	28	109	254	442	372	309	434	373	
Shrikes	3	3	2	2	4	4	7	-	10	15	16	42	29	34	16	
Marsh Warblers	16	3	19	159	217	59	37	17	69	173	305	180	130	275	253	
September dates	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Total birds	505	330	179	117	556	857	1203	1192	631	572	290	388	232	121	65	177
Shrikes	43	29	25	5	24	33	62	113	95	58	39	47	27	24	9	10
Marsh Warblers	276	122	44	41	275	465	596	537	143	170	68	54	24	10	4	14

Table 2. Percentage of ringed shrikes *Lanius* spp. which died at Khor Arba' at in 1984

	ringed	dead	per cent
Red-backed Shrike <i>Lanius collurio</i>	533	36	6.8
Nubian Shrike <i>L. nubicus</i>	186	11	5.9
Woodchat Shrike <i>L. senator</i>	133	12	9.0
Lesser Grey Shrike <i>L. minor</i>	63	8	12.7

Table 3. Examples of weights of some Palaearctic passerine birds from Khor Arba' at in 1982 and 1984 for the same autumn period

Species	1982		1984	
Garden Warbler <i>Sylvia borin</i>	16.0 g	(n=78)	16.4 g	(n=525)
Sprosser <i>Luscinia luscinia</i>	19.3 g	(n=84)	19.4 g	(n=408)
Marsh Warbler <i>Acrocephalus palustris</i>	10.1 g	(n=304)	10.3 g	(n=1461)
Red-backed Shrike <i>Lanius collurio</i>	23.4 g	(n=108)	22.7 g	(n=99)
— 1st-year birds	22.4 g	(n=68)	22.0 g	(n=99)
— adult birds	25.0 g	(n=40)	22.9 g	(n=268)

The analysis of population trends in breeding areas could explain population crashes for some species, but long-term data would be needed, especially from places such as Khor Arba' at during migration.

References

- MOREAU, R.E. & DOLP, R. 1970. Fat, water, weights and wing-lengths of autumn migrants in transit on the northwest coast of Egypt. *Ibis* 112: 209–228.
- NIKOLAUS, G. 1983a. An important passerine ringing site near the Sudan Red Sea coast. *Scopus* 7: 15–18.
- NIKOLAUS, G. 1983b. A bird cemetery in the Nubian Desert, Sudan. *Scopus* 7: 48.

G. Nikolaus, Bosenbüttel 4, 2859 Spieka, Federal Republic of Germany

Scopus 14: 26–28, May 1990

Received 28 September 1989

Breeding records from southern Somalia

The following observations were made during some regular ornithological field excursions of the Somali Ecological Society:

The tiny Mouse-coloured Penduline Tit *Remiz musculus* is recorded as an uncommon, local resident of bush and woodland in the arid and semi-arid regions of Kenya, Uganda and Tanzania (Britton 1980). In Somalia the species is presumed to be an uncommon resident in dry bushland north of Mogadishu (Ash & Miskell 1983).

On 4 November 1988 at 13:00 hrs this species was recorded near a water-hole in dense acacia bush covering the coastal sand-dune, some 20 km south of Mogadishu (2°N) and approximately 10 km inland from the shoreline. The bird was sitting on a perfect little cup-shaped nest made from fine plant substances, to which it carried further nesting material during the course of my observations. The nest was built in a tangle of branches of a *Commiphora* tree some 3 m above ground.

Allen's Gallinule *Porphyrio alleni* has been described by Ash & Miskell (1983) as a scarce Afrotropical visitor to Somalia with one old and two recent records in August and December from the Lower Shebelle region. It is reported as local and uncommon in East and Central Africa, but as a reasonably common, local resident of the coastal lowlands of Tanzania and Kenya, with breeding records at Lake Nakuru, Kiambu, Mombasa, Dar es Salaam, Zanzibar and Pemba (Britton 1980, Williams & Arlot 1980).

On 16 December 1988 at 10:00 hrs two adult Allen's Gallinules with two immatures, slightly smaller than the parents, were observed moving in and out of the reeds alongside a swampy pond near Jannaale, Lower Shebelle region, which suggests that the birds had been breeding there.

These swamps and marshes are located some 85 km south-west of Mogadishu and near the Shebelle river. After the rains they are full to capacity with water and provide refuge for innumerable birds. Apart from Allen's Gallinule I was able to observe a pair Black Crakes *Limnocorax flavirostra* with three young at the same site. A group of huge old kapok trees *Ceiba pentandra* lining the Shebelle river bank at Jannaale were covered with nests of Long-tailed Cormorants *Phalacrocorax africanus*, Great White Egrets *Egretta*